



XV CONVEGNO ITALIANO DEGLI UTENTI DI STATA

Bologna, 15-16 Novembre 2018



9.00 - 9.30 Registrazione dei partecipanti

9.30 - 10.30 I SESSIONE - INVITED SPEAKER

Joint Modelling of Longitudinal and Survival Data • Michael J. Crowther, Department of Health Sciences University of Leicester

Multi-state models are increasingly being used to model complex disease profiles. By modelling transitions between disease states, accounting for competing events at each transition, we can gain a much richer understanding of patient trajectories and how risk factors impact over the entire disease pathway. In this talk, I'll introduce some new Stata commands for the analysis of multi-state survival data. This includes **-msset-**, a data preparation tool which converts a dataset from wide (one observation per subject, multiple time and status variables) to long (one observation for each transition for which a subject is at risk for). **-msaj-** calculates the non-parametric Aalen-Johansen estimates of transition probabilities. **-msboxes-** creates a descriptive plot of the multi-state process through the transition matrix and numbers at risk. **-stms-** fits joint transition-specific survival models, allowing each transition to have a different parametric model, yet maximised jointly to enable sharing of covariate effects across transitions. **-predictms-** calculates a variety of predictions from a multi-state survival model, including transition probabilities, length of stay (restricted mean time in each state), the probability of ever visiting each state and more. Predictions are made at user-specified covariate patterns. Differences and ratios of predictions across covariate patterns can also be calculated. Standardised (population-averaged) predictions can be obtained. Confidence intervals for all quantities are available. Simulation or the Aalen-Johansen estimator are used to calculate all quantities. User-defined predictions can also be calculated by providing a user-written Mata function, to provide complete flexibility. **-predictms-** can be used with a general transition matrix (cyclic or acyclic) and allows the use of transition-specific timescales. I will illustrate the software using a dataset of patients with primary breast cancer.

10.30 - 10.50 Pausa caffè

10.50 - 12.00 II SESSIONE - COMMUNITY CONTRIBUTED, I

12.00 - 13.00 III SESSIONE EXPLOITING THE POTENTIAL OF STATA 15, I

Estimating the average causal effect on an ordinal outcome of an endogenously assigned treatment from an endogenously selected sample • David M. Drukker, Executive Director of Econometrics, StataCorp

This talk discusses the average causal effect (ACE) of an endogenous binary treatment on an ordinal outcome when the sample is subject to endogenous selection. It shows how to estimate the ACE using an extended regression model (ERM) command in Stata.

CODICE

I-SUG

LOCATION e DATE

Il Convegno è previsto a Bologna
il 15-16 Novembre 2018

CONTATTI

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It illustrates how to do regression adjustment in Stata and discusses standard errors for sample-averaged treatment effects and population-averaged treatment effects.

13.00 - 14.15 Pranzo

14.15 - 16.00 IV SESSIONE EXPLOITING THE POTENTIAL OF STATA 15, II

16.00 - 16.15 Coffee Break

16.15 - 17.00 V SESSIONE COMMUNITY CONTRIBUTED, II

17.00 - 17.15 VI SESSIONE REPORT TO USERS WISHES AND GRUMBLES •

DAVID M. DRUKKER, STATA CORP

La sessione "Wishes and Grumbles" offre ai partecipanti la possibilità di interagire direttamente con la StataCorp: sarà possibile evidenziare problemi o limitazioni del software nonché suggerire eventuali miglioramenti o comandi che potrebbero essere inclusi in Stata.

20.15 Cena Sociale (facoltativa)

Come ogni anno proponiamo una serata insieme al termine del Convegno. Ulteriori informazioni saranno a breve disponibili nel nostro sito nella sessione dedicata. Il ritrovo sarà comunque direttamente al ristorante alle ore 20.15 (previa conferma di adesione al momento dell'iscrizione).

CORSO DI FORMAZIONE

Joint Modelling of Longitudinal and Survival Data

Michael J. Crowther • Department of Health Sciences University of Leicester

COURSE DESCRIPTION

The joint modelling of longitudinal and survival data has been an area of growing interest in recent years, with the benefits of the approach becoming recognised in ever widening fields of study. The models can provide both an effective way of conducting an analysis of a survival endpoint (e.g. time to death), influenced by a time-varying covariate measured with error, or alternatively correct for non-random dropout in the analysis of a longitudinal outcome (e.g. a biomarker such as blood pressure). This one-day course will provide an introduction to joint modelling through real applications to both clinical trial data and electronic health records, using examples in cancer and liver cirrhosis. We will study the methodological framework, underlying assumptions, estimation, model building and predictions. We will also consider current developments in the field, looking at some of the many extensions of the standard framework, such as the ability to model multiple biomarkers and competing risks. The course will consist of lectures and computing exercises making use of the *stjm* and *megenreg* packages in Stata, written by the course lecturer.

TARGET AUDIENCE: This one day workshop is of particular interest to biostatisticians, epidemiologists, applied statisticians and researchers or professionals working in economics, the social sciences or public health wishing to carry out survival analysis on longitudinal/panel data in their applied research.

REQUISITES: Participants should be familiar with Stata. A working knowledge of survival analysis and an introductory knowledge of panel data is required.

COURSE OUTLINE

- Introduction
- Lecture 1: Survival analysis, longitudinal analysis and their combination
- Lecture 2: Joint modelling of longitudinal and survival data
- Lecture 3: Extended association structures and predictions
- Lecture 4: Further topics in joint modelling

INFORMAZIONI GENERALI

Il materiale didattico distribuito include le dispense con la parte teorica, i dati e le banche dati per l'implementazione di tutte le applicazioni empiriche e una licenza temporanea del Software Stata 15 valida per 30 giorni dall'inizio del corso. Si consiglia pertanto l'utilizzo del proprio personal computer.

Il numero massimo di iscritti ammessi al Corso di Formazione è 15, ed il termine per presentare la propria richiesta di ammissione è il 5 Novembre 2018.

Per ulteriori informazioni consultare la pagina del convegno <https://www.tstat.it/utenti/xv-convegno-italiano-degli-utenti-di-stata/> oppure contattare la segreteria organizzativa a formazione@tstat.it.

